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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,537	07/18/2000	Hiroshi Tanaka	49761(868)	8668

21874 7590 02/07/2005

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EXAMINER	
PARK, CHAN S	
ART UNIT	**PAPER NUMBER**
2622	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/618,537	TANAKA ET AL.	
	Examiner	Art Unit	
	CHAN S PARK	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/2/04 has been entered.

Response to Amendment

2. Applicant's amendment was received on 11/2/04, and has been entered and made of record. Currently, **claims 1 and 9** are pending.

Response to Arguments

3. Applicant's arguments filed 11/2/04 have been fully considered but they are not persuasive.

Moreover, upon review of the reference of Kawamoto (U.S. Patent No. 6,486,971), which was cited in the Office Action dated 6/3/04 under 35 U.S.C. 102 (e), as being anticipating claims 1 and 9, the examiner notes that the reference can still be interpreted as anticipating the claims, as currently amended.

Particularly, as amended, **claims 1 and 9** now require "wherein variable magnification processing is carried out independently in a scan direction and a cross-

scan direction". The applicant further explains how the current invention differs from the teachings of Kawamoto by citing col. 7, lines 10-19 of Kawamoto. The applicant states, wherein on pages 5 and 6, "[t]hus, magnification processing in the sub scanning direction, according to Kawamoto, is not performed independently from that of the main scanning direction. Moreover, for Kawamoto, the magnification ratio for the sub scanning direction is the same as that for the main scanning direction." Examiner agrees with applicant, in that the magnification processing in the sub scanning direction, according to Kawamoto, is not performed independently from that of the main scanning direction. However, Examiner finds that the magnification processing in the scanning direction is performed independently from that of the sub scanning direction. Referring to applicant's cited col. 7, lines 10-19 of Kawamoto, it is realized that the synchronizing signal is never used in direct/indirect magnification processing of the main scanning direction (i.e. expanding/reducing pixels in the main scanning direction). In other words, Examiner finds that the magnification processing of the main scanning direction has no relationship with or dependency on the sub-scanning direction. Thus, it is concluded that Kawamoto can still be interpreted as "variable magnification processing is carried out independently in a scan direction and a cross-scan direction".

4. Therefore, the rejection of **claims 1 and 9**, as cited in the Office action dated 6/3/04, under 35 U.S.C. 102 (e), as being anticipated by Kawamoto, is maintained and repeated in this Office action.

5. For a proper examination, Examiner kindly requests the applicant to provide and point out where in prior art the applicant's figures 11 & 12 are taught/disclosed.

Additionally, Examiner kindly requests the applicant to show a support for the newly added limitation, as to how this is or can be performed, from the Detail Description of the Specification. It would greatly help Examiner to better take a decision on patentability.

Claim Objections

6. Claims 1 and 9 are objected to because of the following informalities:

Perhaps, the term "a sub-scan direction" is more proper to use than the term "a cross-scan direction".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawamoto.

7. With respect to claim 1, Kawamoto discloses an image processing apparatus provided with a capability of carrying out variable magnification of image data, comprising:

a single FIFO memory for carrying out write/read processing of image data (col. 8, line 3-7);

an enlarging variable magnification unit for carrying out variable magnification processing following write processing and read processing of image data to and from the first-in, first-out memory during image enlargement (col. 8, line 3-7 & col. 8, line 59 – col. 9, line 6); and

a reducing variable magnification unit for writing image data to the first-in, first-out memory after variable-magnification is carried out during image reduction (col. 9, line 7-12),

wherein variable magnification processing is carried out independently in a scan direction and a cross-scan direction (col. 7, lines 10-19).

As set forth above, the magnification processing in the scanning direction is performed independently from that of the sub scanning direction. In other words, the magnification processing of the main scanning direction has no relationship with or dependency on the sub-scanning direction.

8. With respect to claim 9, Kawamoto discloses an image processing apparatus provided with a capability of carrying out variable magnification of image data, comprising:

a line memory (FIFO 63) for storing one line worth of data (col. 8, lines 63-64);

a plurality of image forming means (semiconductor laser elements of the laser array unit 14 in col. 6, line 23);

a plurality of output lines (lines connected to the input of the semiconductor laser elements) for connecting the line memory and the plurality of image forming means;

a plurality of switching means (LED writing head control device 37) for turning the plurality of output lines on or off individually; and

a variable-magnification processing means (enlarging/reducing process 53 in fig. 5) for increasing and decreasing the number of times to turn on the switching means in correspondence to magnification ratio, wherein variable magnification processing is carried out independently in a scan direction and a cross-scan direction (col. 7, lines 10-19).

As set forth above, the magnification processing in the scanning direction is performed independently from that of the sub scanning direction. In other words, the magnification processing of the main scanning direction has no relationship with or dependency on the sub-scanning direction.

Note that since the image data saved in the FIFO is transferred to the printer control 36 and the LED writing control 37 having the semiconductor laser elements for printing process, it is inherent that the FIFO is connected to the plurality of image forming means (semiconductor laser elements) directly or indirectly by plurality of output lines.

Furthermore, it should be noted that the functionality of each semiconductor laser elements depends on the image data processed by the image process device 33, which includes the enlarging/reducing process of fig. 5. Specifically referring to col. 6, lines 22-23, depending on the image data processed by the enlarging/reducing process 53, the current to be given to each of the semiconductor laser elements is controlled or switched by the LED writing control device 37. Therefore, it is inherent that when the image is reduced, certain semiconductor laser elements turn off in certain area of the image by stopping the current, and when the image is enlarged, certain semiconductor laser elements turn on in certain area of the image by allowing the current to flow.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S PARK whose telephone number is (703) 305-2448. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2622

csp
January 28, 2005

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